Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Former Nextel Communications, Inc.	)	WT Docket No. 06-169
Upper 700 MHz Guard Band Licenses	)	
and Revisions to Part 27 of the	)	
Commission's Rules	)	
	)	
Development of Operational, Technical	)	WT Docket No. 96-86
and Spectrum Requirements for Meeting	)	
Federal, State and Local Public Safety	)	
Communications Requirements Through	)	
the Year 2010	)	

NOTICE OF PROPOSED RULE MAKING

Adopted: September 6, 2006 **Released:** September 8, 2006

Comment Date: 30 days after date of publication in the Federal Register
Reply Comment Date: 45 days after date of publication in the Federal Register

By the Commission: Chairman Martin, Commissioners Copps and Adelstein issuing separate statements.

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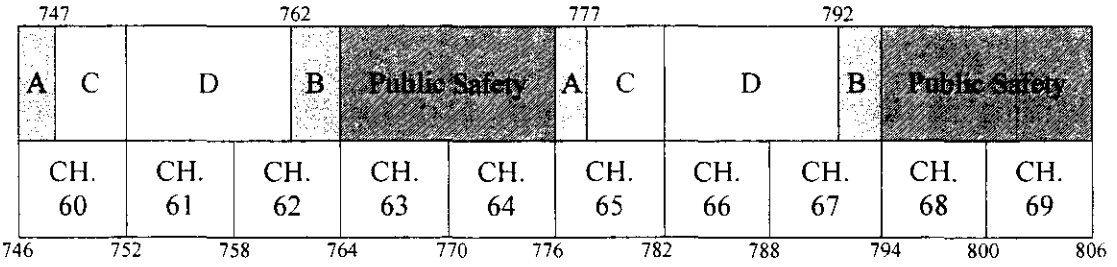
I. INTRODUCTION

1. In this *Notice of Proposed Rule Making (Notice)*, we seek comment on possible changes to the Part 27 service rules applicable to existing and prospective Upper 700 MHz Guard Bands licensees.[1] As reflected in the chart below, these bands are assigned in two blocks of paired spectrum, the A Block (746-747, 776-777 MHz) and the B Block (762-764, 792-794 MHz) (collectively referred to herein as the "Guard Bands").



Block	Frequencies	Bandwidth	Pairing	Licenses
A	746-747, 776-777	2 MHz	2 x 1 MHz	52
B	762-764, 792-794	4 MHz	2 x 2 MHz	52
C	747-752, 777-782	10 MHz	2 x 5 MHz	6
D	752-762, 782-792	20 MHz	2 x 10 MHz	6

2. Guard Bands licensees are governed by a unique set of service rules that were crafted in recognition of the Guard Bands' role in protecting adjacent 700 MHz public safety operations. Since the initial auction of the Guard Bands in 2000, the licensees have reported the deployment of only a handful of systems.[2] Two developments prompt us to seek comment on possible rule changes that could promote more efficient and effective use of the Guard Bands. First, as part of the 800 MHz public safety interference remediation proceeding (WT Docket No. 02-55), in 2004 the Commission reclaimed all of Nextel Communications, Inc.'s (Nextel)[3] Guard Band licenses in 42 of the 52 B Block markets. Second, Congress recently created greater certainty regarding the availability of unencumbered 700 MHz spectrum for wireless commercial and public safety licensees—including the Guard Bands—by establishing a "hard date" of February 17, 2009, by which time incumbent analog broadcasters must vacate the spectrum.[4]

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[1] The service rules were adopted in 2000 and subsequently revised. *See* Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *First Report and Order*, 15 FCC Rcd 476 (2000) ("*First Report and Order*"); Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Second Report and Order*, 15 FCC Rcd 5299 (2000) ("*Second Report and Order*"); Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 20845 (2000) ("*First Reconsideration Order*"); Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Second Memorandum Opinion and Order*, 16 FCC Rcd 1239 (2001) ("*Second Reconsideration Order*").

[2] *See infra* ¶ 13.

[3] On August 12, 2005, Nextel merged with Sprint Corporation to form Sprint Nextel Corporation. *See* Applications of Nextel Communications, Inc. and Sprint Corporation for Consent to Transfer Control of Licenses and Authorizations, WT Docket No. 05-63, *Memorandum Opinion and Order*, 20 FCC Rcd 13967 (2005).

[4] *See* Deficit Reduction Act of 2005, Pub. L. No. 109-171, 120 Stat. 4 (2006) ("DTV Act"). Title III of the DTV Act establishes the DTV transition dates. The DTV Act requires the Commission to commence auctioning of the (continued....)

II. EXECUTIVE SUMMARY

3. In this *Notice*, we seek comment on several proposed service rule changes that may provide *greater technical, operational and regulatory flexibility to licensees in the Guard Bands, while maintaining* adequate protection for public safety operations in the adjacent 764-776 and 794-806 MHz bands. We request commenters to address:

- Whether we should extend our Secondary Markets spectrum leasing policies to the Guard Bands, including any possible reauction of the reclaimed Nextel spectrum, or whether we should continue to apply the existing band manager rules.

- Whether we should increase band manager flexibility for incumbents and prospective licensees by, for example, eliminating or revising restrictions on leasing to affiliates or using spectrum exclusively for internal purposes.

- Whether we should eliminate the prohibition on deploying cellular architectures in the Guard Bands.

- Whether changes to the current Adjacent Channel Power (ACP) limits in the Guard Bands are appropriate.

4. We also seek comment on proposals for relicensing of the returned Nextel Guard Band licenses. We ask commenters to address:

- Whether, as Motorola, Inc. and the United Telecommunications Council have recommended, the reclaimed Nextel spectrum should be reallocated as narrowband channels for critical infrastructure industries in support of interoperability with public safety entities.

- Whether, as Nextel has recommended, the returned Guard Band licenses should be reallocated for exclusive public safety use.

5. We also seek comment on proposals to modify the existing Upper 700 MHz band plan with respect to the Guard Bands, or to preserve the existing band plan. We ask commenters to consider the band plan proposals of existing Guard Band Managers and other interested parties. We tentatively conclude, however, that adoption of any proposal that entails a shift in the narrowband channels within the public safety band would not be appropriate without expeditiously resolving issues relating to the costs of reprogramming existing public safety radios, as well as those relating to further international coordination regarding the use of any shifted narrowband channels in border areas. We also tentatively conclude that any decision to shift the existing Upper 700 MHz band plan in a way that affects "recovered analog spectrum" within the digital television (DTV) transition would need to be made in time to allow the Commission to conduct the auction of recovered spectrum in accordance with the relevant statutory requirements.

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remaining 700 MHz band commercial spectrum no later than January 28, 2008, with auction proceeds to be deposited no later than June 30, 2008 in a "Digital Television and Public Safety Fund." This Fund will be administered by the Assistant Secretary for Communications and Information of the Department of Commerce and would be used for a number of programs, including subsidies for consumer purchases of digital converter boxes, and acquisition of interoperable communications equipment by public safety entities.

III. BACKGROUND

6. Upon completion of the DTV transition on February 17, 2009, broadcasters currently assigned Channels 60-69 (sixty megahertz of spectrum referred to as the "Upper 700 MHz Band") and Channels 52-59 (forty-eight megahertz of spectrum referred to as the "Lower 700 MHz Band") will be relocated to assignments below Channel 52, which will make the 700 MHz Band available for new services. Broadcasters are permitted to remain in the Upper and Lower 700 MHz bands until the end of the DTV transition period. The Balanced Budget Act of 1997 ("BBA") directed the Commission to reallocate the Upper 700 MHz Band for public safety and commercial use by December 31, 1997, and to commence competitive bidding for the commercial licenses after January 1, 2001.[5] The BBA specifically directed the Commission to reallocate twenty-four megahertz for public safety use, and thirty-six megahertz for commercial use.[6] Accordingly, the Commission designated Channels 60-62 and 65-67 for commercial use, and designated Channels 63, 64, 68 and 69 for public safety use.[7]

7. In the *First Report and Order*, the Commission established that a primary goal of the Upper 700 MHz band plan is to ensure that operations in the thirty-six megahertz of commercial spectrum will not cause harmful interference to public safety operations in the former analog TV channels 63-64 and 68-69.[8] Accordingly, the Commission created the Guard Bands to protect the public safety spectrum from interference resulting from commercial operations in the adjacent five and ten megahertz C and D Blocks.[9] At the same time, the Commission permitted operations within the Guard Bands to "allow for effective and valued use of the spectrum, consistent with sound spectrum management, rather than the creation of Guard Band spectrum of little use."[10]

8. The Commission applied a paired-band architecture to the Upper 700 MHz spectrum. The Commission reasoned that most modern mobile telephony applications rely on Frequency Division Duplex as a transmission procedure, which in turn requires paired spectrum.[11] The Commission initially adopted different power limits for each segment of these pairs, anticipating that most licensees would use the lower half of each pair for higher-power transmissions from base stations, and the upper half for lower-power transmissions from control, mobile and portable stations. On reconsideration, the Commission decided to allow commercial licensees to apply either of the power limits to the upper or

[5] *Id.* at 479-80 ¶ 5, citing 47 U.S.C. § 337(a).

[6] 47 U.S.C. § 337(a).

[7] *First Report and Order*, 15 FCC Rcd at 480 ¶ 6.

[8] *Id.* at 490-91 ¶ 33.

[9] *Id.*

[10] *Id.* at 491 ¶ 34. The Commission also allocated each of the Upper 700 MHz spectrum blocks so that they would align with as few incumbent television broadcast channels as possible, in order to expedite deployment, reduce the number of potential negotiated agreements with broadcasters, and avoid a problem of "free riding" third parties benefiting from others' negotiations. *Id.* at 492 ¶ 37.

[11] *Id.* at 494 ¶ 42.

lower segments of the commercial C and D Blocks.[12] The Commission did not disrupt the specified power limits, however, for the A and B Blocks (Guard Bands).[13]

9. In the Second Report and Order, the Commission established the licensing, technical and operational rules for the Guard Bands.[14] This included the creation of Guard Band Managers, a new class of commercial licensee, who make this spectrum available to system operators or directly to end users through private, written contracts known as "spectrum user agreements."[15] In establishing the Guard Band Manager regime, the Commission afforded Guard Bands licensees flexibility to tailor their spectrum to the unique requirements of potential system operators or end users.[16] Such entities can secure spectrum from a Guard Band Manager in varying degrees of quantity, duration and geographic area to best suit their needs.[17] The Guard Band Manager retains ultimate control of spectrum use within the scope of its license, including subdivision of spectrum blocks and geographic areas, frequency coordination, channel selection, resolution of interference conflicts, and compliance with the Commission's rules.[18] Among the stated advantages of band manager licensing was that it "represents an innovative spectrum management approach that should enable parties to more readily acquire spectrum for varied uses, while streamlining the Commission's spectrum management responsibilities,"[19] and provides a "mechanism for market-based transactions in wireless capacity at a time when wireline capacity is being freely traded as a commodity in the marketplace."[20]

10. The Commission stated that the primary responsibility of the Guard Band Manager would be to ensure non-interference with the adjacent public safety band.[21] Accordingly, the Commission adopted a coordination requirement whereby Guard Band Managers must notify Commission-recognized public safety frequency coordinators in the 700 MHz public safety band, as well as adjacent-area Guard Band

[12] *First Reconsideration Order*, 15 FCC Rcd at 20851 ¶ 5; *Second Reconsideration Order*, 16 FCC Rcd at 1244 ¶ 13.

[13] *See* 47 C.F.R. § 27.50(b).

[14] *Second Report and Order, supra* note 1.

[15] *Second Report and Order,* 15 FCC Rcd at 5312 ¶ 27. *See generally* 47 C.F.R. Part 27, Subpart G ("Guard Band Managers").

[16] *Second Report and Order,* 15 FCC Rcd at 5313 ¶ 29.

[17] *Id.* at 5313-14 ¶ 31. As an example, the Commission speculated that end users such as railroads or pipelines would be able to contract with a Guard Band Manager for access to a single frequency across characteristically long, but narrow, service areas, instead of procuring a larger, exclusive and underutilized license. *Id.* at 5314 ¶ 32.

[18] *Id.* at 5314 ¶ 32.

[19] *Id.* at 5313 ¶ 30.

[20] *Id.* at 5313-14 ¶ 31. The Commission noted that, on the wireline side, "spot secondary markets have emerged for the purchase, sale, and lease of wholesale telecommunications capacity," and that, on the wireless side, "implementation of the Band Manager approach to licensing is potentially an important step in the direction of providing spectrum users with more flexibility..." *Id.*

[21] *Id.* at 5314-15 ¶ 33.

Managers, of the technical parameters of any new station or station modification.[22] The Commission stated that Guard Band Managers, as spectrum brokers, have a financial incentive to coordinate use of their frequencies to ensure non-interference.[23] The Commission restricted Guard Band Managers from leasing more than 49.9 percent of their spectrum in a geographic area to affiliates,[24] reasoning that this restriction would ensure a "useful test of the Band Manager concept," while promoting its core feature of leasing spectrum to third parties.[25] The Commission also adopted a rule prohibiting the Guard Band Manager, in their spectrum user agreements, "from imposing unduly restrictive requirements on use of its licensed frequencies, including any requirement that is not reasonably related to the efficient management of the spectrum licensed to the Guard Band Manager."[26]

11. The initial auction of Guard Bands licenses was completed on September 21, 2000.[27] Nine bidders submitted net bids of $519,892,575 for 96 licenses in that auction. The subsequent auction of the eight remaining Guard Band licenses concluded on February 21, 2001.[28] Those remaining licenses were won by three bidders with net bids of $20,961,500.

12. On June 4, 2004, Nextel offered to surrender its 700 MHz Guard Bands B Block licenses in 42 markets, as a point of negotiation within the Commission's ongoing task of re-banding 800 MHz to improve public safety communications.[29] In doing so, Nextel recommended that the Commission rededicate the relinquished spectrum for public safety use.[30] In the *800 MHz Report and Order,* released

[22] *Id.* at 5315 ¶ 34. The Commission requires each notification to specify, within a limited timeframe, frequency, antenna height, antenna location, emission type, effective radiated power, service area description, date of coordination, and user name or description of operation. *Id.*

[23] *Id.* at 5325 ¶ 58.

[24] *Id.* at 5325 ¶ 59.

[25] *Id.*

[26] *See* 47 C.F.R. § 27.602 (g). The Commission provided examples of unduly restrictive conditions (*e.g.*, requiring a spectrum user to purchase telecommunications equipment only from one manufacturer or vendor, or requiring use of a particular technology). *See Second Report and Order*, 15 FCC Rcd at 5328 ¶ 66.

[27] *See* 700 MHz Guard Bands Auction Closes: Winning Bidders Announced, Report No. AUC-33-H (Auction No. 33), *Public Notice*, 15 FCC Rcd 18026 (WTB 2000).

[28] *See* 700 MHz Guard Bands Auction Closes: Winning Bidders Announced, Report No. AUC-38-F (Auction No. 38), *Public Notice*, 16 FCC Rcd 4590 (WTB 2001).

[29] Improving Public Safety Communications in the 800 MHz Band, WT Docket No. 02-55, *Report and Order*, 19 FCC Rcd 14969, 15008 ¶ 61 n.198 (2004) ("*800 MHz Report and Order*"), citing Letter from Robert S. Foosaner, Senior Vice President and Chief Regulatory Officer, Nextel to Marlene H. Dortch, Secretary, Federal Communications Commission (June 4, 2004). The *800 MHz Report and Order* cited to 40 markets being surrendered. In a subsequent *Supplemental Order and Order on Reconsideration*, however, the Commission clarified that there were 42 markets at issue and Nextel was to surrender them by March 10, 2005. Improving Public Safety Communications in the 800 MHz Band, WT Docket No. 02-55, *Supplemental Order and Order on Reconsideration*, 19 FCC Rcd 25120, 25126 ¶ 8 (2004); 70 FR 6757 (Feb. 8, 2005) (established reclamation date of March 10, 2005).

[30] *800 MHz Report and Order*, 19 FCC Rcd at 15008 ¶ 61, n.198.

on August 6, 2004, the Commission accepted Nextel's offer, while deferring to a future rule making any decision on the disposition of the reclaimed spectrum.[31]

13. Currently, there are few systems operating in the Guard Bands. The Commission requires all Guard Band Managers, in lieu of any strict performance requirement, to file annual reports by March 1 of each year in their license term through January 1, 2015.[32] As of March 1, 2006, one of the seven Guard Band Managers reported a total of six spectrum user agreements (SUAs) for voice and data applications. According to the annual reports, spectrum use is limited due to encumbrance by TV/DTV broadcasters until the end of the DTV transition,[33] uncertainty surrounding future plans for the Guard Bands spectrum reclaimed from Nextel, and limited availability of base station and end user equipment.

14. On August 3, 2005, Access Spectrum, L.L.C., Pegasus Guard Band, L.L.C., Columbia Capital Equity Partners III, L.P. and PTPMS II Communications, L.L.C. filed a White Paper advocating a modified Guard Bands band plan, and technical revisions to the service rules, in order to facilitate broadband deployment.[34] They subsequently filed a Supplement on November 4, 2005.[35] According to the authors of the White Paper, their consortium represents Guard Band Managers holding 97 percent of the Guard Band licenses, not including spectrum reclaimed from Nextel and now held by the Commission. Specifically, the consortium holds all of the 52 A Block licenses; and of the 10 B Block licenses not held by the Commission, the consortium holds seven.[36]

15. On April 27, 2006, Motorola, Inc. and the United Telecommunications Council (UTC) filed a proposal ("Motorola/UTC Proposal") to reallocate the licenses surrendered by Nextel in the Guard Bands B Block as narrowband channels for critical infrastructure industries in support of interoperability with public safety entities.[37] While also proposing changes to the adjacent 700 MHz public safety band plan, Motorola argues that one megahertz of the B Block contiguous with the public safety block could carry narrowband channels dedicated to providing critical infrastructure entities with the ability to communicate

[31] The Commission did, however, note that re-designating the spectrum for public safety applications would be "problematic," and that it would be "anomalous...to place public safety systems in the very interference-prone spectrum that we established to protect public safety." *Id.* at 15080 ¶ 208.

[32] *Second Report and Order*; 15 FCC Rcd at 5333 ¶¶ 79-80; 47 C.F.R. § 27.607.

[33] *See supra* note 3.

[34] Access Spectrum, L.L.C., Pegasus Guard Band, L.L.C., Columbia Capital Equity Partners III, L.P. and PTPMS II Communications, L.L.C., *Implementing the Vision for 700 MHz: Rebanding the Upper 700 MHz A and B Blocks for Next-Generation Wireless Broadband*, White Paper (filed Aug. 3, 2005) ("White Paper").

[35] Access Spectrum, L.L.C., Pegasus Guard Band, L.L.C., Columbia Capital Equity Partners III, L.P. and PTPMS II Communications, L.L.C., *Rule Changes to Implement the Proposed Rebanding of the Upper 700 MHz A and B Blocks for Next-Generation Wireless Broadband*, Supplemental White Paper (filed Nov. 4, 2005) ("White Paper Supplement").

[36] For the purposes of this *Notice*, the White Paper authors shall be referred to by its lead authors, "Access/Pegasus."

[37] Motorola, Inc. and United Telecom Council, *Spectrum Toward Next Generation Critical Infrastructure* (filed April 27, 2006) ("Motorola/UTC Proposal"). In an initial filing, Motorola proposed that the B Block be reallocated for both Federal government and critical infrastructure interoperability. Subsequently, Motorola revised its proposal to include only a reallocation for critical infrastructure industries, and not the Federal government. *See* Motorola, Inc., *700 MHz Band Recommendations: Wideband/Broadband; Use of the 700 MHz Nextel Giveback, Ex Parte* filed in WT Docket Nos. 96-86 and 05-157 (filed Dec. 9, 2005).

with state and local agencies. Under the proposal, the other one megahertz of the existing two megahertz B Block (upper and lower segments) would serve as a usable guard band between the critical infrastructure interoperability channels and adjacent commercial D Block spectrum, subject to scaled interference protection requirements that are keyed to a rising noise floor.

16. On March 17, 2006, the Commission adopted a *Notice of Proposed Rule Making (Public Safety Notice)* seeking comment on the potential for broadband communications in the 700 MHz public safety band, including proposals from the National Public Safety Telecommunications Council (NPSTC),[38] Motorola, and Lucent Technologies.[39] In the *Public Safety Notice*, the Commission tentatively concluded that it would not make any changes to the 700 MHz channels already designated for public safety narrowband voice communications.[40] In response to the *Public Safety Notice*, a new consortium consisting of most of the earlier White Paper authors filed comments proposing an "Optimization Plan" to re-band the Upper 700 MHz Band in order to accommodate broadband operations for both Guard Band Managers and public safety entities.[41] Unlike the proposals incorporated into the *Public Safety Notice*, the Optimization Plan does not assume that the locations of the public safety narrowband channels must remain unchanged; rather, it proposes that they be consolidated adjacent with each other at the upper portion of the public safety block. Consolidating the narrowband channels, according to the Optimization Plan, will reduce the amount of spectrum used to separate the public safety broadband and narrowband channels, thus freeing up additional spectrum for public safety as well as commercial broadband operations. Like the White Paper, the Optimization Plan advocates a revision of the Upper 700 MHz band plan so as to increase the bandwidth of the A Block.[42]

IV. DISCUSSION

17. In the following discussion, we seek comment on possible changes to the existing service rules for the Guard Bands that could result in more intensive use of this spectrum through greater operational, technical and regulatory flexibility for licensees. We also seek comment on proposals to revise the Guard Bands band plan. Specifically, we seek comment on certain proposals to designate the reclaimed Nextel spectrum as narrowband channels dedicated to interoperability between critical infrastructure industries and public safety entities, or to leave the existing band plan intact but to reallocate the reclaimed Nextel spectrum exclusively for public safety. We also seek comment on various proposals from existing Guard Band Managers to revise the Upper 700 MHz band plan. In examining

[38] Letter from Vincent R. Stile, Chair, National Public Safety Telecommunications Council, to Michael J. Wilhelm, Chief, Public Safety and Critical Infrastructure Division, Wireless Telecommunications Bureau, FCC, *Ex Parte* in WT Docket Nos. 96-86 and 05-157 (filed Feb. 6, 2006).

[39] Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, *Eighth Notice of Proposed Rulemaking*, WT Docket Nos. 96-86 and 05-157, 21 FCC Rcd 3668 (2006) ("*Public Safety Notice*").

[40] *Id.* at 3675 ¶ 13. NPSTC stressed in its proposal that no changes should be considered with regard to the location of the narrowband channels, due to significant investments in planning already committed by manufacturers and public safety agencies. *Id.* at 3678 ¶ 19.

[41] Comments of Access Spectrum, L.L.C., Columbia Capital III, LLC, Intel Corporation and Pegasus Communications Corporation in WT Docket No. 96-86 (filed June 6, 2006) ("Optimization Plan").

[42] Pegasus, who also had co-authored the White Paper, separately filed comments recognizing the potential for the commercial and the public safety band plan proposals to be resolved in separate proceedings, and limited its recommendations to public safety issues. Comments of Pegasus Communications Corporation in WT Docket No. 96-86 (filed June 6, 2006) ("Pegasus Proposal").

these issues, we remind commenters to consider the time constraints inherent in the DTV transition, including the deadline to commence auctioning all recovered analog TV spectrum in the 700 MHz Band by January 28, 2008.[43] We also remind commenters of the need to avoid disruption of the planning, funding and deployment of public safety systems within the 700 MHz public safety band. We tentatively conclude that it would not be appropriate to adopt any proposal that entails a shift in the narrowband channels within the public safety band unless two issues—the costs of reprogramming existing public safety radios and international border coordination—are resolved expeditiously. We also tentatively conclude that any decision to shift the existing Upper 700 MHz band plan in a way that affects "recovered analog spectrum" within the DTV transition would need to be made in time to allow the Commission to conduct the auction of recovered spectrum in accordance with the relevant statutory requirements.

A. Operational, Technical and Regulatory Flexibility

1. Guard Band Manager Status and Eligibility

18. Subsequent to the *Second Report and Order* and the application of a band manager licensing scheme to the Guard Bands, the Commission established new rules in 2003 to facilitate spectrum leasing for many exclusive wireless services (*Secondary Markets First Report and Order*).[44] The Secondary Markets rules generally permit two types of leasing options, *de facto* transfer leasing and spectrum manager leasing. A *de facto* transfer lease arrangement places primary responsibility upon the lessee to interact with the Commission and ensure compliance with the Commission's rules.[45] Under this option, "licensees and spectrum lessees may enter into spectrum leasing arrangements—for any amount of spectrum, in any geographic area, and for any period of time within the scope and term of the license—in which *de facto* control of the leased spectrum is transferred to the spectrum lessee(s) for the duration of the lease."[46] An application to the Commission seeking prior approval of the *de facto* transfer of the leased spectrum is required. Under the second option, spectrum manager leasing, "licensees and spectrum lessees may enter into spectrum leasing arrangements—for any amount of spectrum, in any geographic area, and for any period of time within the scope and term of the license—without the need for prior Commission approval, provided the licensees retain *de facto* control...over the leased spectrum."[47] Both of the Secondary Markets options require Commission filings through the Universal Licensing System (ULS) that include detailed information on the amount, frequency and geographic location of each lessee's spectrum, as well as the length of the lease and whether the lessee has any overlapping spectrum interests.[48]

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[43] *See supra* note 3 and accompanying text.

[44] *See* Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, *Report and Order and Further Notice of Proposed Rulemaking*, 18 FCC Rcd 20604, 20644-45 ¶ 85 n.189 (2003) ("*Secondary Markets First Report and Order*"). The Commission reasoned that "leasing on shared frequencies presents implementation concerns, particularly when the shared (or non-exclusive) nature of licensing on such frequencies permits interested parties to seek their own authorizations to operate and where the loading levels may convert a license on a previously shared frequency to an exclusive license." *Id.* at 20644-45 ¶ 85. *See generally* 47 C.F.R. Part 1, Subpart X ("Spectrum Leasing").

[45] *Secondary Markets First Report and Order*, 18 FCC Rcd at 20612-13 ¶ 13.

[46] *Id.* In this type of spectrum leasing arrangement, the licensee retains *de jure* control. *Id.*

[47] *Id.* at 20610-12 ¶ 12. In this type of lease arrangement, the licensee retains both *de jure* and *de facto* control. *Id.*

[48] *See* 47 C.F.R. ¶¶ 1.9010, 1.9020, 1.9030, 1.9035.

19. The Commission did not apply Secondary Markets spectrum leasing policies to the Guard Bands when those policies were adopted.[49] The Commission also did not extend the Secondary Markets policies to the Guard Bands in the 2004 *Secondary Markets Second Report and Order*, noting that the Guard Bands "already has its own distinct set of policies and rules regarding leasing arrangements, and no commenters proposed replacing those policies" with the model adopted in the Secondary Markets proceeding.[50]

20. We note, however, that in adopting the *Secondary Markets First Report and Order*, the Commission applied its new spectrum leasing rules to supplant the band manager provisions previously adopted for the paired 1392-1395 MHz, 1432-1435 MHz bands and in the unpaired 1390-1392 MHz, 1670-1675 MHz, and 2385-2390 MHz bands.[51] In certain other services, the Commission sought comment on whether to apply the band manager concept, but ultimately declined to do so. For example, in 2002 (prior to the adoption of the *Secondary Markets First Report and Order*), the Commission declined to license band managers in the Automated Maritime Telecommunications System (AMTS) band, stating that "diverse uses of AMTS spectrum can be better accomplished by allowing AMTS licensees the option to make service and spectrum available to third parties via partitioning and disaggregation agreements as well as using the spectrum themselves."[52] In 2004, the Commission extended its Secondary Markets spectrum leasing policies to the AMTS band.[53] More recently, the Commission adopted rules providing for nationwide, non-exclusive licensing of terrestrial operations in the 3650-3700 MHz band, and opted not to apply band manager rules after seeking comment on the issue.[54]

21. Most of the existing 700 MHz Guard Band Managers favor replacement of Guard Band Manager rules with the Secondary Markets regime. Access/Pegasus, for example, state that the Secondary Markets rules have "overtaken the band manager experiment."[55] Proponents of the Secondary

[49] *Secondary Markets First Report and Order*, 18 FCC Rcd at 20644-45 ¶ 85.

[50] *See* Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, *Second Report and Order, Order on Reconsideration and Second Further Notice of Proposed Rulemaking*, 19 FCC Rcd 17503, 17534-35 ¶ 64 (2004) ("*Secondary Markets Second Report and Order*").

[51] *Secondary Markets First Report and Order*, 18 FCC Rcd at 20644-45 ¶ 85. *See also* Amendments to Parts 1, 2, 27 and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, *Report and Order*, 17 FCC Rcd 9980, 9998 ¶¶ 38-39 (2002) (adopting revised band manager rules for twenty-seven megahertz of Government Transfer Band spectrum).

[52] *See* In the Matter of Amendment of the Commission's Rules Concerning Maritime Communications, *Second Memorandum Opinion and Order and Fifth Report and Order*, 17 FCC Rcd 6685, 6696 ¶ 25 (2002).

[53] *Secondary Markets Second Report and Order*, 19 FCC Rcd at 17531-32 ¶ 58 (noting that AMTS service involves "a geographic licensing approach similar to another Part 80 service, VHF Public Coast stations, which also involves exclusive use licenses and already is permitted to enter into spectrum leasing arrangements under the leasing policies pursuant to the [Secondary Markets] Report and Order.")

[54] *See* Wireless Operations in the 3650-3700 MHz Band, *Report and Order and Memorandum Opinion and Order*, 20 FCC Rcd 6502 (2005). The Commission also indicated that its secondary markets spectrum leasing rules would not be applied to the 3650 MHz band as any licenses would be non-exclusive there, and the rules have only been applied to exclusive services. *Id.* at 6516-17 ¶¶ 41-43; *see also* Wireless Operations in the 3650-3700 MHz Band, *Notice of Proposed Rulemaking*, 19 FCC Rcd 7545, 7572-74 ¶¶ 89-93 (2004).

[55] White Paper Supplement at 30.

Markets regime argue that "an unintended consequence [of the Guard Band rules] has been the inefficient use of highly valuable spectrum, creating a stark contrast with the Commission's more recent efforts to provide licensees greater flexibility."[56] They further contend that the restriction on a band manager in using its spectrum to provide wireless services "complicates prospects for any broadband system that an *A or B Block licensee might wish to deploy on its own or through an affiliate, particularly in combination* with the requirement that the band manager lease the majority of its spectrum to unaffiliated parties" and that because a "single broadband channel would occupy all or at least most of the spectrum in either the A or B Block, the current rules appear to foreclose an affiliate deployed broadband service..."[57] These Guard Band Managers state that the associated benefit of encouraging protection of the adjacent public safety block will be fully maintained in the Secondary Markets scenario, because the licensee's ultimate responsibility to prevent violations of the Commission's rules is no different.[58]

22. We seek comment on whether we should retain our existing Guard Band Manager rules or whether we should apply a different regulatory structure, such as the Secondary Markets rules.[59] We also ask whether we should apply the existing Guard Band Manager rules to the returned Nextel spectrum or whether another regulatory structure is appropriate, even if existing rules are retained for incumbent licensees. We also ask whether we should permit existing or new licensees to choose among several regulatory options for managing the Guard Bands, and if so, how we may best implement such an approach, including how to accommodate different regulatory schemes within the same band. As discussed below, we also seek comment on an alternative approach involving relaxation of certain band manager restrictions, while retaining the overall band manager concept.

23. We ask commenters to address the relative merits of each of the various spectrum leasing mechanisms that could be applied to the Guard Bands, weighing the relative transactional burdens between licensee and lessee, and administrative burdens between the affected parties of complying with the Commission's rules. We also ask commenters to address whether it remains necessary to: (a) permit only band managers to be licensed in the 700 MHz Guard Bands; (b) require leasing to third parties (whether commercial, private or public safety users) to guarantee spectrum access through negotiated SUAs; and (c) prohibit the band manager from using spectrum for its internal purposes. Are the benefits of the band manager concept outweighed by the benefits that could flow from a more flexible scheme that permits market forces to determine the best use of the Guard Bands spectrum, which could include implementation of Secondary Markets spectrum leasing policies? We also seek comment on whether, as an alternative to eliminating the band manager regime in the Guard Bands, we should consider rule revisions to increase band manager flexibility to achieve more efficient and effective spectrum use. For example, should we remove or lessen the restriction on leasing to affiliates? Should we permit a band manager to use its licensed spectrum in some capacity exclusively for internal purposes, or to enter into agreements, negotiated at an arm's length, that may include currently prohibited restrictive conditions?

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[56] *Id.*

[57] *Id.* at 27.

[58] *Id.* at 31-32.

[59] We note that removing strict band manager requirements could correspondingly permit more flexible implementation of our partitioning and disaggregation rules than under current rule section 27.605, which provides that "an entity that acquires a portion of a Guard Band Manager's geographic area or spectrum subject to a geographic portioning or spectrum disaggregation agreement under Section 27.15 must function as a band manager and is subject to the obligations and restrictions on Guard Band manager licenses set forth in this subpart." 47 C.F.R. §27.605.

24. Finally, we ask any proponent of a revised Guard Bands management regime to comment on how its proposal will fulfill the primary responsibility of any Guard Bands licensee to ensure non-interference with the adjacent 700 MHz public safety band.

2. Cellular System Architecture

25. In the *Second Report and Order*, the Commission restricted operation in the Guard Bands to entities that do not use a cellular system architecture.[60] This restriction was intended to prevent the type of interference—sometimes referred to as "near/far"—where a public safety mobile/portable operating in the proximity of one of the multiple base station transmitters deployed by an adjacent band commercial licensee using a cellular system architecture could experience interference.[61] In this instance, the public safety mobile/portable cannot receive the desired signal from a public safety transmitter because the public safety mobile/portable is receiving a stronger, commercial signal from the commercial licensee's base station.[62] In establishing the cellular architecture restriction, the Commission reasoned that cellular systems characteristically produce large numbers of base stations within a relatively small geographic area, thus complicating the task of coordinating frequencies between each and every one of these base stations, and the various public safety systems operating in the area.[63] In the *Second Report and Order*, the Commission also indicated that Guard Band systems could cause additional types of interference to public safety systems, referred to as "front-end overload" and "desensitization" interference.[64] These could occur if and when public safety mobiles operate in the vicinity of high-powered Guard Band base stations. These types of interference can be mitigated through frequency coordination, wherein Guard Band and public safety licensees would agree to operate on frequencies sufficiently separated from one another to prevent interference.

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[60] The Commission defined a cellular system architecture as "one where large geographic service areas are segmented into many smaller areas or cells, each of which uses its own base station, to enable frequencies to be reused at relatively short distances." *Id.* at 5306 ¶ 14 n.34. The Commission noted that its definition is similar to that established in 47 C.F.R. ¶ 22.99. *Id.*

[61] The Commission expressed a concern regarding "interference to the operations of both vehicular and portable public safety units," and noted a particularly troubling potential interference scenario where the system architecture employs very small cells like residential "roof top" base stations, and a "public safety official situated in a home might be required to use a handset to call for 'back up.'" *Id.* at 5309 ¶ 22 n.50.

[62] The Commission found it necessary to re-band the 800 MHz band to resolve this type of "near/far" interference which, in that band, was "caused by a fundamentally incompatible mix of two types of communications systems: cellular-architecture multi-cell systems—used by ESMR and cellular telephone licensees—and high-site non-cellular systems—used by public safety, private wireless and some SMR licensees..." *800 MHz Report and Order*, 19 FCC Rcd at 14972-73 ¶ 2.

[63] *Second Report and Order*, 15 FCC Rcd at 5308 ¶ 19. The Commission asserted that the frequency coordination required of entities operating in the Guard Bands "can be accomplished without great difficulty when the Guard Bands users' systems consist, as do public safety systems, of base stations operating at a single site that provides coverage to a large geographic area," but that such coordination of cellular architectures, while theoretically possible, would be a "complex, uncertain and resource-intensive task for both commercial and public safety users." *Id.*

[64] Front-end overload occurs when unwanted emissions detected by a receiver (*i.e.*, emissions not in the receiver passband) produce unwanted mixing products in the receiver's mixer or radio frequency (RF) amplifier. These products can result in increased noise level and distortion, which interfere with the proper detection of the desired signal. Desensitization occurs when the unwanted emissions enter a receiver's mixer and cause the receiver's automatic gain control circuitry to attenuate both unwanted and desired signals. As a result, the desired signal may be attenuated to a level where it cannot be adequately detected. *Id.* at 5306 ¶ 15 n.37.

26. Access/Pegasus state that current broadband technologies are typically based on cellular architecture and, accordingly, they request the removal of the cellular architecture prohibition because it "is a serious obstacle to the deployment of broadband."[65] Access/Pegasus contend that interference is not caused by a cellular architecture *per se*, but rather by any single low-power, low-antenna height transmitter that provides a relatively high field intensity in geographic areas where the desired public safety signal is weak (*e.g.*, public safety mobile handsets).[66] They propose that the addition of a power flux density (PFD) limit, together with improved receiver technology, would support elimination of the restriction on cellular system architectures.

27. In 2002, the Commission imposed a PFD limit in the *Lower 700 MHz Report and Order* to minimize potential interference between adjacent channel commercial systems.[67] The Commission provided that "licensees operating base stations at power levels in excess of 1 kilowatt [Effective Radiated Power (ERP)] must design their systems such that transmissions from their base station antenna produce PFD levels that are no greater than the PFD levels that would ordinarily occur from stations operating at power levels of 1 kilowatt ERP."[68] The Commission noted then that the PFD standard "will minimize the likelihood of adjacent channel interference to ground-based devices by effectively limiting the energy received by such devices to levels no greater than what they would receive from adjacent channel base stations operating at 1 kilowatt ERP or less."[69] As Access/Pegasus acknowledge, however, the commercial Lower 700 MHz Band does not contain, and thus does not require, protection of public safety spectrum.[70] According to Access/Pegasus, the application to the Guard Bands of a unique, more restrictive PFD limit of 25 microwatts per square meter to within 1 kilometer of the transmitting base station would make a cellular system architecture feasible. Access/Pegasus state that this PFD standard "recognizes the increased caution with which the Commission appropriately approaches the risk of interference to public safety operations."[71]

28. Access/Pegasus also argue that the quality of public safety receivers will reduce the potential for interference from a system utilizing a cellular architecture. In the *800 MHz Report and Order*, the Commission incorporated receiver performance criteria as a basic element of its regulatory solution to prevent interference.[72] Access/Pegasus argue that public safety systems in the Upper 700 MHz Band

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[65] White Paper Supplement at 10.

[66] *Id.*

[67] *See* Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), GN Docket No. 01-74, *Report and Order*, 17 FCC Rcd 1022, 1064 ¶ 104 (2002) ("*Lower 700 MHz Report and Order*").

[68] More specifically, the Commission required licensees "operating base stations at power levels greater than 1 kilowatt ERP to limit the calculated PFD of the signal from their base stations to 3,000 microwatts per square meter at any location at ground level within 1km of their base station transmitter." *Id.*

[69] The Lower 700 MHz PFD limit reduces potential adjacent channel interference between the different commercial services in the band (*e.g.*, high-power broadcast type operations and low power land mobile operations) by maintaining a ground PFD from high-power, high-site broadcast antennas comparable to a lower-power land mobile ground PFD.

[70] *Lower 700 MHz Report and Order*, 17 FCC Rcd at 1064 ¶ 103.

[71] White Paper Supplement at 12.

[72] Access/Pegasus refer to the Commission's adoption of public safety receiver standards in the *800 MHz Report and Order*, wherein the Commission required public safety licensees seeking full protection from interference to (continued....)

likely will use radios that meet the same Class A standards that largely were adopted for the 800 MHz performance criteria.[73] Accordingly, they conclude that these improvements in receiver technology, together with the addition of a PFD limit, justify the elimination of the cellular architecture restriction.

29. We seek comment on the Access/Pegasus analysis, and on whether the restriction on cellular architecture in the Guard Bands should be maintained, eliminated or merely more clearly defined. Would elimination of the cellular architecture prohibition likely result in the provision of commercial service in the Guard Bands through deployment of broadband services, or additional technologies such as GSM/GPRS/EDGE? If we were to eliminate the cellular architecture restriction, should we implement the PFD limit that Access/Pegasus suggest, or some other limit? To what extent would the Access/Pegasus proposed PFD limit, or an alternative PFD limit, provide sufficient interference protection to adjacent band public safety systems to obviate the need for existing frequency coordination requirements? Will implementation of a PFD limit substantially reduce the risk of interference to public safety receivers located within the proposed 1 kilometer distance from a Guard Band licensee's base station? We also seek comment on the types of receivers that 700 MHz public safety entities have deployed, or are likely to deploy, including whether such licensees are using, or will use, advanced-technology receivers (*e.g.*, Class A) as Access/Pegasus suggest.[74] Conversely, will the increased density of any cellularized Guard Band operation present a significant barrier to protecting public safety operations? We also ask whether, and to what extent, elimination of the cellular architecture prohibition and resulting increased density of Guard Band operations could increase the risk of intermodulation interference,[75] and if so, whether concern about such potential interference should be a consideration in determining whether to eliminate the cellular architecture restriction.

30. We also seek comment on another option, applied either independently or in conjunction with a PFD limit, to reduce the 1 kilowatt maximum ERP limit for Guard Bands base stations implemented in a cellular architecture. Reducing ERP limits could minimize the area of interference surrounding each base station, thereby reducing the overall potential for interference to adjacent channel public safety mobiles/portables. We therefore ask what base station ERP limit applied to a Guard Bands system based on a cellular architecture would adequately protect public safety systems, and whether a base station ERP at that level would permit sufficient coverage for commercial operations. Conversely, will a reduced ERP limit result in a increase of base stations to meet coverage requirements, thus resulting in an increased potential for interference to public safety operations? We note that in the *Second Report and Order*, the Commission was unable to conclude that the adoption of any particular power restriction for Guard Bands systems would necessarily or adequately address front-end overload, and desensitization.[76] Commenters

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use receivers meeting portions of the TIA-102 Class A standards regarding modulation rejection, adjacent channel selectivity, and receiver sensitivity. White Paper Supplement at 13. *See also 800 MHz Report and Order*, 19 FCC Rcd at 15032-34 ¶¶ 109-114.

[73] White Paper Supplement at 13.

[74] *Id.*

[75] Intermodulation interference occurs when two frequencies, both removed from the frequency carrying the desired signal, interact to cause interference to the frequency carrying the desired signal. *See, e.g.*, Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands, IB Docket No. 01-185, *Memorandum Opinion and Order and Second Order on Reconsideration*, 20 FCC Rcd 4616, 4637 ¶ 58 (2005).

[76] *Second Report and Order*, 15 FCC Rcd at 5306-07 ¶ 15 n.39. The Commission noted that while a Guard Bands transmitter operating at a lower power would, in general, cause less interference than a Guard Bands transmitter operating at a higher power, the effects and extent of these forms of interference (front-end overload and (continued....)

also should therefore address whether there is a reduced base station power level that will enable licensees to address potential front-end overload and desensitization to public safety receivers. In this context, we ask whether such a reduced power limit within a cellular system architecture would then obviate the need for Guard Bands licensees to coordinate with adjacent-band public safety operations.[77] If not, we seek comment on the feasibility and desirability of maintaining the current coordination requirement for Guard Bands licensees proposing higher-density cellular architectures. Finally, we ask any proponents of changes to the cellular architecture restriction to comment on how their proposals will fulfill the primary responsibility of any Guard Bands licensee to ensure non-interference with the adjacent 700 MHz public safety band.

3. Adjacent Channel Power (ACP) and Out-of-Band Emission Limits (OOBE)

31. In the *700 MHz First Report and Order,* the Commission concluded that licensees operating in the C and D Blocks of the Upper 700 MHz Band must provide out-of-band emission (OOBE) protection to services outside each licensee's assigned spectrum by, at a minimum, attenuating power below the transmitter power (P) by at least 43 + 10 log P dB for any emission on all frequencies outside the licensee's authorized spectrum.[78] To provide additional interference protection to operations in the public safety bands, the Commission imposed a required attenuation below transmitter power for base and fixed stations operating in the 747-762 MHz band and fixed stations operating in the 777-792 MHz band by at least 76 + 10 log P dB per 6.25 kilohertz in the 764-776 MHz and 794-806 MHz public safety bands, and an attenuation below the transmitter power for mobile and portable stations operating in the 777-792 MHz band by at least 65 + 10 log P dB per 6.25 kilohertz in the 764-776 MHz and 794-806 MHz public safety bands.[79]

32. Having established OOBE limits for the C and D Blocks in the *First Report and Order*, the Commission decided in the *Second Report and Order* to apply to the Guard Bands a more stringent protection standard called Adjacent Channel Power (ACP) limits, reasoning that the immediate proximity of the Guard Bands to the public safety block justifies an application of the same emission limit for the Guard Bands as applies for emissions from within the public safety block.[80] The Commission applied this

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desensitization) are dependent on various, additional factors such as spectral and spatial proximity between the transmitter and receiver, and the particular technical characteristics of the receiver. *Id.*

[77] *See* 47 C.F.R. § 27.601(d)(1) (requiring Guard Band Managers to notify 700 MHz public safety band frequency coordinators, and other adjacent-area Guard Band Managers, of all relevant base station technical parameters within one business day after it has coordinated a new station or station modification, or filed an application for an individual station license). The Commission also has noted that "[t]hrough frequency coordination, a Guard Band licensee and a public safety licensee can select operating frequencies so that such frequencies are as far from one another as possible," resulting in "advance cooperation between parties in an effort to locate base stations and select frequencies so as to minimize the likelihood of interference once systems become operational." *Second Report and Order*, 15 FCC Rcd at 5308 ¶ 18.

[78] *First Report and Order*, 15 FCC Rcd at 518 ¶ 103; 47 C.F.R. § 27.53(c)(1) and (2).

[79] *First Report and Order*, 15 FCC Rcd at 519-20 ¶¶ 105-106; 47 C.F.R. § 27.53(c)(3) and (4).

[80] *Second Report and Order*, 15 FCC Rcd at 5306 ¶ 14. *See also* Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communication Requirements Through the Year 2010, WT Docket No. 96-86, *Fifth Memorandum Opinion and Order, Sixth Report and Order, and Seventh Notice of Proposed Rulemaking*, 20 FCC Rcd 831, 849 ¶ 40 (2005). We note that in January 2005, the Commission changed the terminology used in sections 90.543 and 27.53 of its rules from Adjacent Channel Coupled Power (ACCP) to Adjacent Channel Power (ACP), noting that there is no technical distinction between the two terms and that ACP has become the more accepted term in the industry. *Id.* at 832 ¶ 3 n.1.

more stringent standard because "[a] public safety receiver is susceptible to interference not only from out-of-band energy that falls *within* its passband, but also from energy from unwanted emissions located *outside* its passband—energy that can cause interference to the operation of the receiver."[81] The Commission further noted that "no receiver filter can perfectly pass a desired signal while also perfectly rejecting unwanted signals."[82] ACP limits differ from OOBE limits in that they require several different power attenuation levels at specific points displaced from the center frequency of a channel.[83] OOBE limits, on the other hand, require that out-of-band signal power be attenuated to ensure that the maximum out-of-band signal power maintains an established, constant relation to the transmitter power.

33. Access/Pegasus, with a focus on deploying broadband in the Guard Bands, note that the ACP limits do not contemplate larger channel sizes, such as a 1.25 megahertz channel that could facilitate broadband.[84] They contend that the ACP requirements should be "replaced by protections that are designed to address emissions from channels of other bandwidths, including those channels contemplated for broadband operations."[85] Further, Access/Pegasus state that if the Commission replaced the ACP limits currently applicable to the Guard Bands with the OOBE limits currently applicable to the C and D Blocks, the "level of OOBE protection for Public Safety would be greater (*i.e.*, OOBE would be attenuated to a lower value below carrier power) than the level of OOBE protection compelled by the current [ACP] requirements."[86]

34. We seek comment on this analysis and on whether any changes to our current ACP limits are appropriate. We recognize that the emission limits for the commercial Upper 700 MHz Band were based on an established channelization for the 700 MHz public safety block facilitating narrowband and wideband communications,[87] and note that the Commission recently sought comment on possibly reconfiguring the 700 MHz public safety band plan to facilitate broadband operation.[88] We therefore ask commenters to consider the appropriate emission limits to protect public safety operations in the event broadband operations are permitted in the public safety block. Moreover, we seek comment on whether, in the event the Commission maintains the current ACP limits and does not apply OOBE limits to the Guard Bands as Access/Pegasus request, we should amend the current ACP tables currently set forth in rule section 27.53(d)[89] to account for operations wider than 150 kilohertz. If commenters believe this is necessary, we seek comment on the appropriate attenuation values for bandwidths greater than 150 kilohertz, so as to maintain adequate protection for public safety operations. Finally, we ask any

[81] *Second Report and Order*, 15 FCC Rcd at 5306-07 ¶ 15.

[82] *Id.*

[83] *See* 47 C.F.R. § 27.53(d).

[84] White Paper Supplement at 5. Access/Pegasus note that "although the current [ACP] requirements do not prohibit broadband operations per se, their failure to provide emissions standards for channels greater than 150 kilohertz creates uncertainty as to the emissions standards that would apply to a 1.25 MHz channel in the re-banded A and B Blocks." *Id.* at 3.

[85] *Id.* at 3-5.

[86] *Id.* at 6. *See also id.* at 7, Tables entitled "Public Safety Protection from Interference Under Proposed OOBE Limits v. Current ACCP Requirements."

[87] *Cf.* White Paper Supplement at 5 n.10.

[88] *See supra Public Safety Notice.*

[89] 47 C.F.R § 27.53(d).

proponent of changes to the ACP/OOBE limits to comment on how its proposal will fulfill the primary responsibility of any Guard Bands licensee to ensure non-interference with the adjacent 700 MHz public safety band.

35. Access/Pegasus made its proposals regarding the ACP requirements and the cellular architecture prohibition in conjunction with its proposed band plan revisions for the 700 MHz Guard Bands.[90] However, we may determine that it is not in the public interest at this time to revise the Guard Bands band plan. Accordingly, we seek comment on whether either, or both, of the technical changes discussed above (*i.e.* possible elimination of the cellular architecture prohibition and/or replacement of current Guard Bands ACP limits with OOBE) are appropriate independent of re-banding. Commenters supporting technical rule changes in the absence of re-banding are requested to address how these technical rule changes can significantly enhance commercial operation in the Guard Bands if we maintain the current band plan. In contrast, we also seek comment on the relative merits of maintaining the status quo, and refraining at this time from any (or all) changes to the service rules. Should we simply re-license the 42 B Block licenses reclaimed from Nextel, and apply the same service rules that we established before assigning the initial licenses?

B. Band Plan Proposals and Returned B Block Spectrum

36. Nextel's return to the Commission of 42 of the 52 B Block licenses, and increased certainty regarding the dates by which the remaining Upper 700 MHz commercial allocation must be auctioned, has prompted certain parties to propose reconsideration of the Upper 700 MHz band plan. As discussed previously, in the *Public Safety Notice*, the Commission tentatively concluded that the narrowband channels within the paired 700 MHz public safety block should not be moved from their current locations.[91] The *Public Safety Notice* nevertheless sought comment on its tentative conclusion and, as noted earlier, commenters have responded with proposed changes to the band plan. Based on those comments, we seek comment here on whether the existing Upper 700 MHz band plan should be changed, and ask commenters to consider several alternative band plan proposals set forth below.

1. Allocation of Returned Nextel Spectrum for Critical Infrastructure Industries and/or Public Safety Entities

37. UTC represents the interests of, among others, critical infrastructure industries, including public utility companies. According to UTC, our nation's critical infrastructure industries require wireless communications that are reliable, ubiquitous in coverage, and interoperable with public safety entities during emergencies, particularly where these critical infrastructure industries are among first responders to a disaster or emergency.[92] In a joint proposal with Motorola, UTC proposes that the returned B Block spectrum be reallocated as narrowband interoperability channels for critical infrastructure industries communications. Of the two megahertz paired spectrum, the upper one megahertz of each pair would be contiguous with the narrowband public safety 700 MHz spectrum, as well as properly "guarded" from the commercial D Block. The lower one megahertz of each pair would be a usable guard band subject to an increased noise floor as it nears the upper edge of the D Block.

[90] *See infra* Section IV.B.2.

[91] *Public Safety Notice*, 21 FCC Rcd at 3675-76 ¶ 13.

[92] *See* Motorola/UTC Proposal.

Finally, they contend that interference at the edge of the D Block can be overcome by deployment of more narrowband sites.[93]

38. *We seek comment on the Motorola/UTC proposal. Specifically, we seek comment on the* potential benefit of creating this separate class of interoperability channels, distinct from the interoperability that may be possible between critical infrastructure industries and public safety entities within the public safety block. Additionally, we seek comment on whether such an allocation would be the highest and best use of the spectrum. For example, is there a demonstrable need for critical infrastructure industries to acquire additional spectrum for interoperability with public safety entities, and if so, can that need be satisfied through other means such as purchase of auctioned licenses for using spectrum other than the B Block? We also ask for comment on how we should determine which entities are eligible to use the interoperability channels and under what circumstances? For example, should use of the channels be limited to emergency communications? We also request comment on the method by which critical infrastructure entities would obtain access to the spectrum. Should we license the spectrum on an exclusive basis pursuant to competitive bidding, or are there other licensing mechanisms that we should consider consistent with section 309(j)(6)(E) of the Communications Act that would avoid mutual exclusivity and therefore not require auctions? As discussed further in Section IV.B.3, we also seek comment on whether this proposal should be limited to the 42 licenses returned from Nextel, or applied to all 52 licenses by clearing the remaining 10. To the extent that we determine it is in the public interest to clear the entire B Block, we seek comment on the appropriate method and timing for recovering spectrum from the remaining incumbent B Block licensees, and whether such licensees should be afforded incentives or some other form of equitable compensation for clearing the band, *e.g.*, rights in a two-sided auction, replacement spectrum, or some other benefit. Finally, we seek comment on the interference implications of the proposal to the adjacent public safety and adjacent D Block spectrum.

39. We also seek comment on Nextel's recommendation in the 800 MHz proceeding that the Commission rededicate the relinquished spectrum for exclusive public safety use. We seek comment on whether there have been any technical or marketplace developments that may alleviate the Commission's concern that re-designating the spectrum for public safety applications may result in increased interference to public safety.[94]

2. Guard Band Manager Proposals

40. As previously noted, a consortium consisting of almost all of the existing Guard Band Managers initially filed a White Paper proposing three alternative Upper 700 MHz band plans with the goal of facilitating broadband communications inside the Guard Bands. They subsequently filed a Supplement providing additional details regarding proposed changes to the technical rules for the Guard Bands (discussed in Section IV.A above). In response to the *Public Safety Notice*, a new consortium consisting of most of the White Paper proponents, Access Spectrum, L.L.C., Columbia Capital III, LLC, Intel Corporation and Pegasus Communications Corporation (collectively, "Optimization Proponents"), then filed the Optimization Plan, advocating another, more comprehensive band plan proposal that implicates the Upper 700 MHz public safety block. Because the Optimization Plan does not specifically disclaim the preceding White Paper band plan proposals, we seek comment on both the White Paper proposals and the Optimization Plan here. In the interest of focusing this proceeding, however, we do not outline in detail each of the White Paper proposals in this *Notice*. Rather, we seek comment generally with regard to the White Paper proposals within the larger and more recent context of the Optimization Plan.

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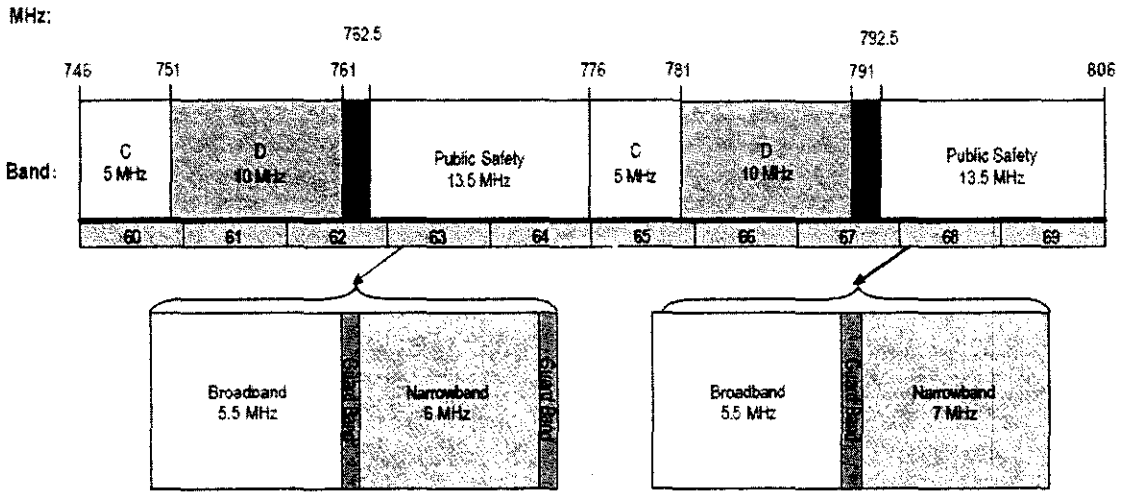
[93] *Id.*

[94] *See 800 MHz Report and Order*, 19 FCC Rcd at 15080 ¶ 208.

41. In evaluating the merits of these Guard Band Manager proposals, commenters should address the feasibility of broadband deployment within one-and-a-half megahertz of spectrum, as viewed in the context of other technical reforms discussed in this *Notice* for protecting the public safety block. Although improved technologies resulting in faster data rates using smaller bandwidths have evolved since the Guard Bands were first established,[95] the A Block at only one megahertz wide per segment, or two megahertz wide in total, remains limited to voice communications and low data transmission rates (typically described as "narrowband"). However, assuming that the A Block could be enlarged to one-and-a-half megahertz or more, we seek comment on the feasibility of deploying broadband applications within as little as one-and-a-half megahertz of bandwidth, taking into account the public safety interference protection requirements unique to the Guard Bands. We ask commenters to assess the minimum bandwidth required for each respective broadband technology, given the paramount necessity to protect public safety operations in the 700 MHz Band.

a. Optimization Plan

42. The following diagram illustrates the revision to the Upper 700 MHz band plan proposed in the Optimization Plan:[96]



43. In the *Public Safety Notice*, the Commission sought comment on whether the 700 MHz public safety band should be modified to promote broadband communications, but tentatively concluded that the narrowband channels located within the paired 700 MHz public safety block at the bottom and the top of each pair should not be moved from their current locations in the band plan.[97] In response, the Optimization Proponents filed joint comments proposing the Optimization Plan, whereby the lower narrowband channels would be consolidated with the upper narrowband channels, freeing up a total of

[95] At the time when the Commission created the Upper 700 MHz band plan, commenters in that proceeding asserted that a minimum bandwidth of five megahertz paired was necessary in order to achieve data rates consistent with the level of service typically called "3G." *First Report and Order*, 15 FCC Rcd at 491-93 ¶¶ 35-39. For example, some commenters asserted that five megahertz segments each could achieve bidirectional 384 kbps mobile data streams, which would be regarded as wideband and sufficient for some forms of Internet access. *Id.* at 491 ¶ 36, 492 ¶ 38.

[96] Optimization Plan at 5 (diagram copied here from Optimization Plan).

[97] *Public Safety Notice*, 21 FCC Rcd at 3675-76 ¶ 13.

four megahertz of spectrum currently being used as guard bands within the paired public safety block.[98] Public safety channels that could be used for broadband would be consolidated at the lower end of the paired public safety block. The Optimization Plan proposes that, outside of the public safety block, the six megahertz of existing commercial Guard Bands would cease to serve as guard bands as they would no longer be required as buffers between public safety narrowband and commercial broadband operations, and thus could be used for broadband deployment.[99] The Optimization Plan proposes that three megahertz from the existing B Block should be allocated to the public safety block as additional spectrum for broadband communications, and the remaining one megahertz from the B Block and two megahertz from the existing A Block should be combined into a consolidated A Block that would be adjacent to the public safety broadband segment.[100] The proposal is based upon an assumption that similar broadband allocations, whether for commercial or public safety operations, can be adjacent to one another without the extent of interference concerns that follow when narrowband blocks are adjacent to broadband blocks without any guard band in between. In this context, the Optimization Plan (as well as the White Paper) contends that adjacent commercial and public safety broadband blocks provide opportunities for commercial/public safety partnerships to deploy "mixed-use" or "shared" networks with public safety priority access.[101]

44. According to the Optimization Proponents, maintaining the existing spectral locations of public safety narrowband is a waste of valuable spectrum because it requires extra guard bands to separate the proposed broadband allocation in the middle of the public safety block from the narrowband allocations located at each end.[102] Further, the Optimization Proponents contend that the costs and work involved to move and consolidate the narrowband allocations would be relatively minimal. For instance, the Optimization Plan notes that even though a few of the 700 MHz Regional Planning Committees have had their plans approved, most of the plans would need to be modified to make wideband or broadband channels available even under the current band plan.[103] Additionally, the Optimization Proponents contend that much of the work of coordinating the narrowband channels has already been done and would not be affected by the proposed narrowband reallocation.[104] The Optimization Proponents further argue that while a "meaningful" number of dual-band 700/800 MHz radios have been deployed and are in use at

[98] Optimization Plan at 4.

[99] *Id.*

[100] *Id.* at 4-5.

[101] *Id.* at 10-11; White Paper at 10-13.

[102] Optimization Plan at 12.

[103] *Id.* at 18, citing *Public Safety Notice*, 21 FCC Rcd at 3680 ¶ 25 n.82, 3685 ¶ 35. Regional Planning Committees (RPCs) are responsible for creating and managing regional plans with the goal of ensuring that public safety spectrum is put to the best and most efficient use for public safety services. Each RPC must submit its plan regarding the assignment of licenses to the Commission for approval. Four of the nation's fifty-five RPCs have already assigned narrowband channels pursuant to their approved plans. However, most of the approved plans do not include planning for current wideband channels. *See also* Pegasus Proposal at 8-10. According to Pegasus, as of May 2006, only 26 towers have been reported to be operational in 4 locations. *Id.* at 9.

[104] Optimization Plan at 18. The Optimization Plan states that through the use of tools such as the Computer Assisted Pre-Coordination Resource and Database System (CAPRAD), any new work required would not be costly in terms of time or money. According to the Optimization Plan, RPCs have determined the number of channels each geographic area or public safety entity will receive—decisions that, it argues, will not require revisiting. The Optimization Plan asserts that although the RPCs in some cases will need to revise the assignment of specific frequencies or allotment of channels, that task could easily be completed in real time by CAPRAD. *Id.*

800 MHz, few are in use in the 700 MHz spectrum and it is unclear how many will ever be utilized there.[105] To the extent that such radios would require reprogramming, the Optimization Proponents assert that no hardware changes would be necessary.[106] The Optimization Proponents argue that the benefits to the public safety community of more available spectrum and potential commercial/public safety partnerships, together with the opportunities for the Guard Band Managers to deploy new services, outweigh the burdens associated with moving the narrowband allocations.[107]

45. We note that several public safety entities, in response to the *Public Safety Notice*, have argued that the Optimization Plan may have merits, but cannot be considered without reconciling the substantial costs of moving the narrowband channels, and thus reprogramming an estimated 600,000 radios—with dual 700/800 MHz capability—that have already shipped to public safety licensees.[108] Additionally, they argue, changes to the channel plan may result in the relocated narrowband channels being blocked by existing Canadian TV broadcasters in border areas, raising new issues that are not addressed in completed agreements between the United States and Canada for shared use of the 700 MHz Band.[109] Accordingly, they argue that any band plan revision must be contingent upon the reconciliation with existing agreements, or the resolution of new agreements, between the United States and Canada for use of the 700 MHz public safety band in the border areas.[110] Finally, the public safety community cautions that significant changes to the 700 MHz band plan could cause delay in the planning, funding and deployment of public safety systems at 700 MHz and even 800 MHz.[111]

46. We realize that many of these issues may more properly be resolved in the *Public Safety Notice* proceeding, while the Optimization Plan simultaneously focuses on the Guard Bands and the public safety block of the Upper 700 MHz Band.[112] However, mindful of the fact that the *Public Safety*

[105] *Id* at 17.

[106] *Id.* at 7.

[107] *Id.* at 17.

[108] In its initial comments to the *Public Safety Notice*, NPSTC opposed any change to the narrowband voice and data channel assignments. *See* Comments of NPSTC in WT Docket No. 96-86 at 8 (filed June 5, 2006). However, in reply comments NPSTC recognized the merits of the Optimization Plan, but stated that "the merits of the Access Spectrum proposal depend on resolving several contingencies." *See* Reply Comments of NPSTC in WT Docket No. 96-86 at 11-12 (filed July 6, 2006) ("NPSTC Reply Comments"). The principal contingency raised by NPSTC is that revisions to the narrowband voice and data channel assignments should not result in an expense to public safety licensees. *Id.* at 7-12. *See also* Letter from Association of Public Safety Communications Officials International, Inc. (APCO), International Association of Chiefs of Police, International Association of Fire Chiefs, Major Cities Chiefs Association, Major Counties Sheriffs Association and National Sheriffs Association to Catherine Seidel, Acting Chief, Wireless Telecommunications Bureau, FCC, *Ex Parte* in WT Docket No. 96-86 (filed July 31, 2006) ("APCO *Ex Parte* Letter").

[109] APCO *Ex Parte* Letter at 1. Although commenters express concern solely about the need to re-negotiate settled agreements with Canada, we note that coordination also is necessary for the border areas between Mexico and the United States, where agreements are underway with regard to the existing channel plan, but have not yet been finalized.

[110] NPSTC Reply Comments at 7-12.

[111] APCO *Ex Parte* Letter at 1.

[112] Indeed, we note that in contrast, Pegasus Communications Corporation, one of the Guard Band Managers who jointly filed the Optimization Plan and the original White Paper, separately filed comments in response to the *Public Safety Notice* that are limited in scope to the public safety block, choosing to abstain at this time from (continued....)

Notice deferred to this proceeding our disposition of the B Block licenses reclaimed from Nextel, we seek comment here on the Optimization Plan in order to develop a comprehensive record between the two proceedings. More specifically, we seek comment on those aspects of the Optimization Plan that relate to the stated goals of the existing Guard Bands licensees, including service rule changes previously discussed in this *Notice*. We agree with commenters to the *Public Safety Notice* that the potential costs of moving the narrowband channels and reprogramming existing 700/800 MHz public safety radios, as well as the possible need to negotiate amended or new agreements with Canada and Mexico,[113] are significant issues that would have to be resolved before the Commission could adopt a channel plan that shifts the narrowband channels. We also share the commenters' concern that consideration of changes to the narrowband allocation could cause delay in the planning, funding and deployment of public safety systems pending Commission deliberations. We tentatively conclude, therefore, that it would not be appropriate to engage in any shifting of the narrowband channels in the 700 MHz public safety band unless these issues are resolved expeditiously. We ask proponents of any shifting of the narrowband channels to detail their proposals for resolving these issues, and their associated timelines for completion. What are the specific tasks that must be accomplished and associated expenses that must be satisfied? For example, commenters should identify measures that would be required to reprogram existing 700/800 MHz public safety radios, including information regarding the steps necessary to reprogram specific models. Would it be more difficult and costly to reprogram some radios than others? The Optimization Plan contends that most, if not all, of the radios currently deployed are in use at 800 MHz, and states that it is unclear how many of these radios will actually used in the 700 MHz Band.[114] Is it necessary therefore to reprogram all existing radios? We ask commenters to identify and assess other tasks and costs that must be assumed in order to effectuate a shift of the narrowband channels, including those associated with modifying existing RPC plans.[115] Is there a date by which the above issues must be resolved in order for the Commission to continue consideration of changes to the narrowband allocation? If so, what date would strike the best balance between our consideration of the potential benefits of the Optimization Plan, and the public safety community's need for certainty?

47. In addition to the timing concerns expressed by the public safety community, we seek comment on timing concerns that may be implicated by the statutory requirements of the DTV transition. The 700 MHz spectrum being recovered in the transition possesses propagation characteristics that are well suited for the provision of a variety of services, including broadband services. The propagation characteristics of this spectrum are also well suited for the provision of services in rural and underserved areas and could dramatically speed the deployment of advanced wireless services to these areas. Accordingly, the recovered spectrum is a valuable resource promising numerous public benefits, and thus should be put to its intended new uses as soon as possible. As noted earlier, we tentatively conclude that any decision to shift the existing Upper 700 MHz band plan in a way that affects "recovered analog spectrum" within the DTV transition must provide sufficient time for the Commission to meet its

(Continued from previous page)

proposing any particular disposition of the Guard Bands should the Commission decide not to resolve the entire Upper 700 MHz Band in a unified proceeding. *See* Pegasus Proposal at 7.

[113] The current agreement with Canada is premised upon the current band plan. *See* Sharing Arrangement Between the Department of Industry of Canada and the Federal Communications Commission of the United States of America Concerning the Use of the Frequency Bands 764 to 776 and 794 to 806 MHz by the Land Mobile Service Along the Canada-United States Border, Arrangement G Land Mobile (Public Safety Services (June 20, 2005)). The proposed band plan would require new agreements between the United States and Canada, and the United States and Mexico. The Commission typically conditions final spectrum plans along the border areas on compliance with existing agreements or resolution of future agreements with Canada and Mexico.

[114] Optimization Plan at 17.

[115] *See supra* ¶ 44.

statutory obligation to commence auctioning by January 28, 2008. We seek comment on the appropriate date by which any band shift must be decided upon in order to enable prospective bidders to adequately prepare for the auctioning of remaining spectrum in the Upper 700 MHz Band. We also seek comment on whether this date would also serve as an appropriate deadline by which resolution of the concerns raised by public safety must occur. Would the date by which a decision must be made regarding a band plan shift also sufficiently satisfy the public safety community's need for an expeditious resolution of its reprogramming and border issues?

48. Further, in the event we conclude that the public interest would be served by adoption of the band plan proposed in the Optimization Plan, we seek comment on how the reconfigured and enlarged A Block should be assigned. Specifically, should the reconfigured A Block spectrum be made available for licensing through competitive bidding, or are there other licensing mechanisms that we should consider consistent with our statutory authority? What rights should existing A Block licensees have to operate in the reconfigured band? Should they be required to give up their existing licenses so that the entire reconfigured band is made available for licensing, or should they be entitled to retain them? If the former, should they be afforded some form of equitable compensation for clearing the band (*e.g.*, rights in a two-sided auction, replacement spectrum, or some other benefit), and how would such compensation be structured? If the latter, should rights to the additional one megahertz of bandwidth in the reconfigured A Block be made available for licensing to any applicant (through competitive bidding or some other licensing mechanism), or should the current A Block incumbents acquire rights to the additional spectrum automatically? If the A Block incumbents receive expanded rights without being required to bid for them, how should such rights be valued, and what mechanisms should be employed to ensure that incumbents do not receive a windfall?

b. White Paper

49. As noted earlier, although we do not outline in detail each of the proposed White Paper band plans in this *Notice*, we ask any interested party to comment on the specific White Paper proposals within the larger and more recent context of the Optimization Plan. Generally speaking, the White Paper's three band plan proposals would increase the existing allocation of one megahertz for the A Block up to one-and-a-half or two megahertz. In order to facilitate broadband within an enlarged A Block, the White Paper proposals involve either eliminating the B Block while adding bandwidth to the A Block and the public safety block, or reducing the B Block while adding bandwidth to the A Block. All of these scenarios also would entail some shift in the position of the commercial spectrum blocks in the Upper 700 MHz Band.

50. Because these proposals involve shifts in the Upper 700 MHz band plan, we seek comment on the same cost, timing and equitable compensation issues raised by consideration of the Optimization Plan. Specifically, we seek comment on the tasks that would need to be accomplished to implement these proposals, and the associated costs that would be incurred. We also seek comment on how quickly we would need to take action to implement these proposals in order to avoid disruption to 700 MHz public safety users and meet our statutory obligations associated with the DTV transition.[116] Finally, we seek comment on the equitable compensation implications of enlarging the A Block bandwidth while reducing or eliminating the B Block bandwidth.[117]

51. We also seek comment on a spectrum shift option that is not specifically proposed in the White Paper, whereby each of the A Block pairs increases by one-half megahertz up to one-and-a-half

[116] *See supra* ¶¶ 46, 47.

[117] *See supra* ¶ 48.

megahertz, while each of the B Block pairs decreases by one-half megahertz down to one-and-a-half megahertz. This would involve shifting the spectral locations of the C and D Blocks upward by one-half megahertz, having no effect on their respective bandwidths of five and ten megahertz. This spectrum shift could accommodate the existing A Block Guard Band Managers' desire for at least one-and-a-half megahertz of bandwidth, potentially enabling broadband deployment. We seek comment on the cost, timing, and equitable compensation implications of this option as well.

3. Disposition of Returned B Block Spectrum

52. As an initial matter, we seek comment on whether any further alternative band plan proposals, apart from those discussed above, should be considered. Are there, for example, alternative band plans that would preserve the dividing lines among the existing public safety block, Guard Bands and C and D Blocks, but that potentially provide more spectrum useable for broadband within those allocations? We also seek comment on any alternative band plan proposals that would promote the most efficient and effective use of the B Block spectrum reclaimed from Nextel. We ask commenters to supplement any such proposal with a detailed technical description of how the public safety block would continue to receive sufficient protection from interference. Finally, we seek comment on the relative merits of maintaining the status quo of the existing band plan. Should we simply re-auction the 42 B Block licenses reclaimed from Nextel, subject to the same band plan that we established before we assigned the initial licenses? To the extent that we conduct an auction with or without a revised band plan, should we limit the potential bidders to specific classes such as critical infrastructure industries?

53. With regard to the proposals for revising the Upper 700 MHz band plan, they all would require an adjustment of the Guard Bands B Block in terms of changes to spectral location and/or reduced bandwidth. Aside from the former Nextel licenses that were returned to the Commission, ten additional licenses still remain active. Our ability to adopt any of these proposals or otherwise modify the B Block could depend upon the disposition of those remaining active licenses.

54. We seek comment on the various ways that the Commission could clear, either involuntarily or voluntarily, most or all of the B Block of existing licenses equitably in order to maximize the overall value of the Guard Bands. Under an involuntary plan that would clear the entire B Block, existing licensees could be given the choice of returning their licenses in exchange for a bidding credit, or accepting a modified license with reduced bandwidth at a new spectral location together with a smaller bidding credit. In either case, the amount of the bidding credit would be determined by the winning bids, in a new auction, for spectrum comparable to spectrum relinquished by the licensee (*i.e.*, the bidding credit is dependent upon the comparable value of the returned spectrum). Thus, existing licensees would have the opportunity to retain spectrum access equivalent to that provided by their current license.

55. Alternatively, we seek comment on a voluntary plan where only those blocks that reach agreement could be available for the new auction, on an MEA-by-MEA basis. Such voluntary agreements might involve the B Block licensee returning its license outright, offering its license in an auction of other 700 MHz spectrum licenses in exchange for a bidding credit based on auction prices, or negotiating with the A Block licensee, if the A Block licensee would benefit directly from the returned spectrum. Finally, we seek comment on any other proposals that would result in the complete or partial clearing of the B Block in order to facilitate further changes to the Upper 700 MHz band plan raised in this *Notice*.

V. PROCEDURAL MATTERS

A. *Ex Parte*

56. *This proceeding shall be treated as a "permit-but-disclose" proceeding in accordance with the* Commission's *ex parte* rules.[118] Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one- or two-sentence description of the views and arguments presented is generally required.[119] Other rules pertaining to oral and written presentations are set forth in Section 1.1206(b) of the Commission's rules as well.

B. Initial Regulatory Flexibility Analysis

57. Pursuant to the Regulatory Flexibility Act (RFA),[120] the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the proposals considered in this *Notice*. The text of the IRFA is set forth in the Appendix. Written public comments are requested on this IRFA. Comments must be filed in accordance with the same filing deadlines for comments on the *Notice*, and they should have a separate and distinct heading designating them as responses to the IRFA. The Commission will send a copy of the *Notice*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.[121]

C. Initial Paperwork Reduction Act of 1995 Analysis

58. This *Notice* contains proposed new and modified information collections. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collections contained in this *Notice*, as required by the Paperwork Reduction Act of 1995, Public Law No. 104-13. Public and agency comments are due 60 days from the date of publication of the *Notice* in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law No. 107-198, *see* 44 U.S.C. § 3506(c)(4), we seek specific comment on how we might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

D. Comment Filing Procedures

59. Pursuant to Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments in response to this *Notice* no later than on or before 30 days after

[118] 47 C.F.R. §§ 1.1200, 1.1206; Amendment of 47 C.F.R. § 1.1200 *et seq*. Concerning Ex Parte Presentations in Commission Proceedings, GC Docket No. 95-21, *Report and Order*, 12 FCC Rcd 7348 (1997).

[119] 47 C.F.R. § 1.1206(b)(2).

[120] *See* 5 U.S.C. § 603. The RFA has been amended by the Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

[121] 5 U.S.C. § 603(a).

Federal Register publication. Reply comments to these comments may be filed no later than on or before 45 days after Federal Register publication. All pleadings are to reference **WT Docket Nos. 06-169 and 96-86**. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. Parties are strongly encouraged to file electronically. *See* Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24,121 (1998).

60. Comments filed through the ECFS can be sent as an electronic file via the Internet to http://www.fcc.gov/e-file/ecfs.html. Parties should transmit one copy of their comments to the dockets in the caption of this rulemaking. In completing the transmittal screen, commenters should include their full name, U.S. Postal Service mailing address, and the applicable dockets or rulemaking number. Parties may also submit an electronic comment via Internet e-mail. To get filing instructions for e-mail comments, commenters should send and e-mail to ecfs@fcc.gov and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply.

61. Parties choosing to file by paper must file an original and four copies of each filing in **WT Docket Nos. 06-169 and 96-86**. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). If more than one docket or rulemaking number appears in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. The Commission's mail contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, DC 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743. U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, S.W., Washington, DC 20554. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

62. Comments submitted on diskette should be on a 3.5-inch diskette formatted in an IBM-compatible format using Word for Windows or compatible software. The diskette should be clearly labeled with the commenter's name, proceedings (including the docket numbers, in this case WTB Docket Nos. 06-169 and 96-86), type of pleading (comments or reply comments), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase: "Disk Copy – Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file.

63. All parties must file one copy of each pleading electronically or by paper to each of the following: (1) The Commission's duplicating contractor, Best Copy and Printing, Inc., 445 12th Street, S.W., Room CY-B402, Washington, DC 20554, telephone (202) 488-5300, facsimile (202) 488-5563, or via e-mail at FCC@BCPIWEB.COM.

64. Comments and reply comments and any other filed documents in this matter may be obtained from Best Copy and Printing, Inc., in person at 445 12th Street, S.W., Room CY-B402, Washington, DC 20554, via telephone at (202) 488-5300, via facsimile at (202) 488-5563, or via e-mail at FCC@BCPIWEB.COM. The pleadings will be also available for public inspection and copying during regular business hours in the FCC Reference Information Center, Room CY-A257, 445 12th Street, S.W., Washington, DC 20554, and through the Commission's Electronic Filing System (ECFS) accessible on the Commission's Web site, http://www.fcc.gov.

65. Commenters who file information that they believe is proprietary may request confidential treatment pursuant to Section 0.459 of the Commission's rules. Commenters should file both their